

208 Water Quality Management Planning Water Quality Board Work Meeting

Background

The federal Clean Water Act of 1972 provided a national strategy for cleaning up the nations' waters. The Act created a national goal of "fishable-swimmable waters" in the United States. One of the strategies to achieve that goal was an aggressive planning activity outlined in Section 208 of the Act which encouraged and facilitated the development and implementation of area-wide waste treatment management plans. It required state governors to identify areas with water quality problems and designate local entities to develop what came to be known as "208 Plans". Utah largely relied on its existing structure of Association of Governments as the local "208" planning entities.

Utah designated the following nine 208 water quality management areas (listed date is the date of EPA approval of the 208 Water Quality Management Plan)

Designated 208 water quality management agencies

Bear River Association of Governments	05/02/1980
Weber Basin Association of Governments	05/11/1979
Salt Lake County	12/11/1979
Mountainland Association of Governments	03/23/1979
Uintah Basin Association of Governments	09/28/1979
Southeastern Utah Association of Governments	05/22/1980
Five County Association of Governments	05/02/1980

Non-designated area – State has lead responsibility

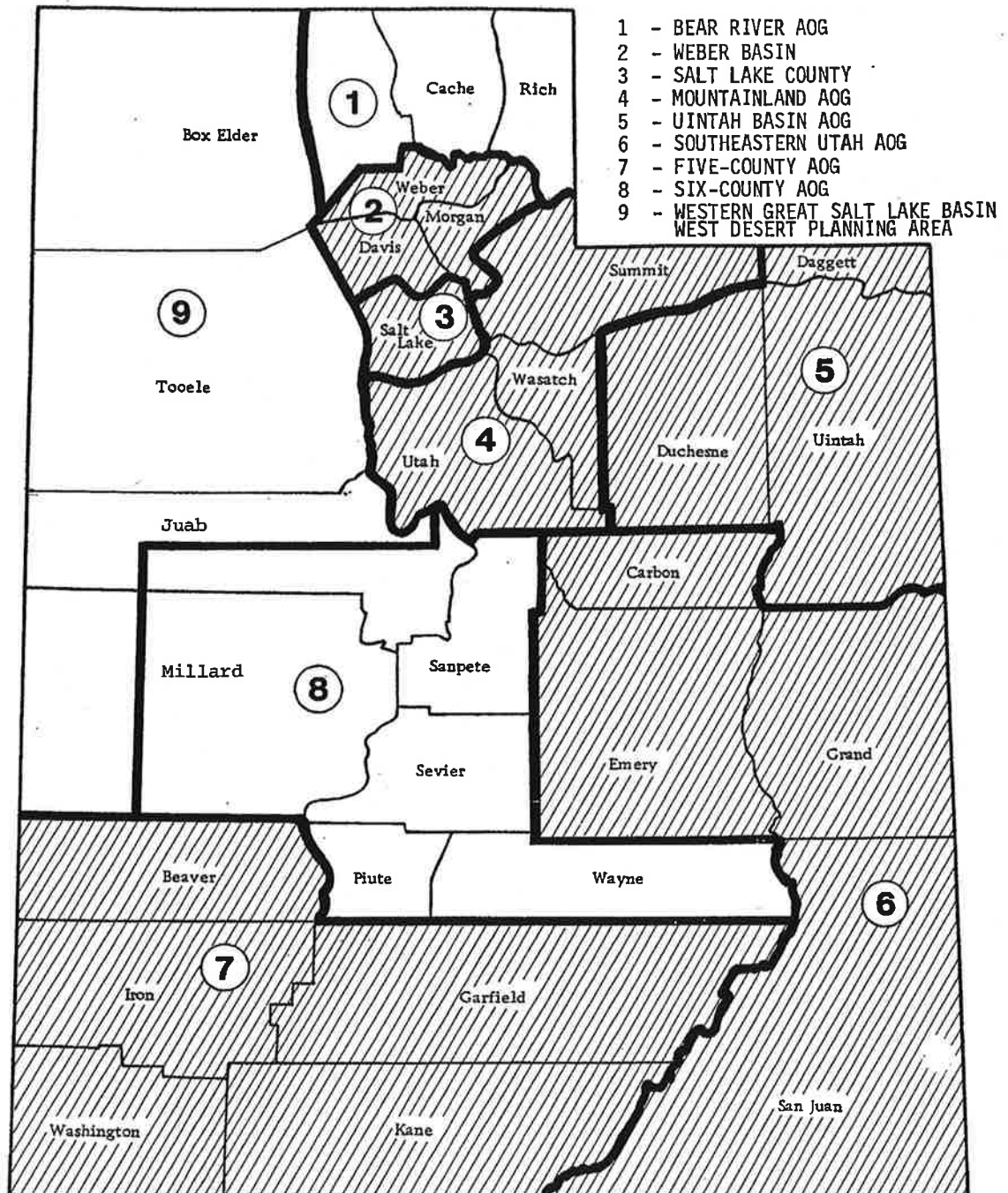
Six County Association of Governments	04/29/1981
West Desert	05/15/1981
Bear River Association of Governments	05/02/1980

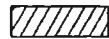
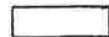
The Clean Water Act provided strong incentive for states to conduct 208 planning: First, EPA provided 100% grant funds to develop the plans and second, completion of 208 planning was required for the states to be eligible for federal wastewater construction grant (75% grant) and loan funds. While these programs were responsible for updating much of Utah's wastewater infrastructure through the 1970's and 1980's, federal grant funds for both 208 planning and construction have not been available for over 20 years. Utah's 208 plans were completed in the late 1970's and, with a few exceptions, have not been updated.

Current Status of 208 Updates

Through the eighties, when an engineering facility plan (then called a "section 201" plan) was completed for funding, it would then be formally incorporated as an amendment into the approved 208 plan. This practice was gradually discontinued as the funding under the program dried up. Many of the original 201 facility plans were completed prior to the 208

UTAH AREA WIDE
WATER QUALITY MANAGEMENT (WQM)
AGENCIES



 - DESIGNATED AREA WIDE WQM AGENCIES (*Grant Agreements directly w/EPA*)
 - NON-DESIGNATED WQM AGENCIES (STATE HAS LEAD RESPONSIBILITY)

Areawide Management Plans. For example, prior to completion of the original MAG 208 plan, there were 7 “201 plans” completed that covered basically all of MAG’s major populated areas. The results of those assessments were then incorporated into the point source section of the 208 plan.

In August of 2005, South Valley Sewer District (SVSD) made a request that Salt Lake County amend their Area-Wide Water Quality Management Plan. In the process of revisiting the 1978 plan, it became apparent that numerous factors had changed significantly since 1978. Salt Lake County elected to fund a complete update of their 208 plan and completed the process in 2009.

Mountainland Association of Governments (MAG) completed its 208 Area-wide Water Quality Management Plan for Summit, Utah and Wasatch Counties in June of 1977. A copy of the first few pages and the table of contents from that plan is attached to give an idea of the content. The plan was partially updated in 1984 with the completion of the Jordanelle Reservoir Water Quality Management Plan, and again in 2004 to incorporate the Deer Creek Reservoir TMDL. These updates did not repeal or replace the original plan, but were incorporated into the existing plan as amendments.

An impetus for the 208 plan updates in these last two instances was the concern that project antagonists would appeal permits for these facilities on the basis of them not being in harmony with existing 208 plans. In the case of the Provo River, the state and the Provo River Watershed Council were acutely aware that the existing management plan contained a prohibition against new point source discharges that required an amendment (in the form of an approved TMDL) to the plan.

Regulatory Structure

The original 208 water quality management plans completed in the late 1970’s were funded entirely with federal grant dollars provided under the Clean Water Act. These funding sources have not been available for close to 30 years. While the funding has dried up, the regulatory structure that came with it remains. Section 208 planning requirements are still contained within the language of the Clean Water Act and implementing regulations, both state and federal. The potential for delay of and litigation on needed infrastructure found not to be in conformance with an approved 208 plan does exist.

Nationally, several states, notable Ohio, Arizona, and New Jersey continue to update their plans on a regular basis. Many states have not updated their plans since the early 1980’s. Others state such as Colorado and Nevada update their plans on an as-needed basis. Still others incorporate their various programs and planning authorities under the Clean Water Act into a statewide 208 plan approach. States using this approach include New Mexico, Oklahoma and Virginia.

EPA Headquarters and Region VIII have been largely silent, and evasive when pressed, on the topic of 208 planning and its continued relevancy. It appears that this stance is

largely due to significant structural changes in the way states are conducting water quality planning and implementation when compared to the early days of the Clean Water Act. Currently, many states view the focused effort of water quality assessment, 303(d) listing, nonpoint source programs, local watershed councils, watershed management plans and TMDLs as largely supplanting the role of traditional 208 planning.

The following excerpt from 40 CFR 130.6 outlines the required elements of a 208 plan. Added in italics is staff's general assessment of what we are and are not doing in this regard as we compare these requirements to our existing statewide and project level water quality planning and implementation activities.

Requirements of a 208 Water Quality Management Plan

WQM plan elements. Sections 205(j), 208 and 303 of the Act specify water quality planning requirements. The following plan elements shall be included in the WQM plan or referenced as part of the WQM plan if contained in separate documents when they are needed to address water quality problems.

(1) Total maximum daily loads. TMDLs in accordance with sections 303(d) and (e)(3)(C) of the Act and §130.7 of this part. *Utah has fully implemented a TMDL program that meets the requirements of this section.*

(2) Effluent limitations. Effluent limitations including water quality based effluent limitations and schedules of compliance in accordance with section 303(e)(3)(A) of the Act and §130.5 of this part. *Effluent limitations are addressed for all point sources through the UPDES Program through wasteload allocations and discharge permits.*

(3) Municipal and industrial waste treatment. Identification of anticipated municipal and industrial waste treatment works, including facilities for treatment of stormwater-induced combined sewer overflows; programs to provide necessary financial arrangements for such works; establishment of construction priorities and schedules for initiation and completion of such treatment works including an identification of open space and recreation opportunities from improved water quality in accordance with section 208(b)(2) (A) and (B) of the Act. *Much of this element regarding financial arrangements, priorities and schedules is addressed by the state revolving loan fund and hardship grant programs, along with the intended use plan and project priority list. The Water Quality Board and staff, through its funding programs, provide planning direction on issues such as regionalization and appropriate wastewater technologies for prospective projects. Future wastewater needs are partially addressed by the annual wastewater needs study. However, a direct state process for identification and planning for future waste treatment works is less robust. Additionally, the identification of open space and recreation opportunities from improved water quality has not typically been addressed.*

(4) Nonpoint source management and control. (i) The plan shall describe the regulatory and non-regulatory programs, activities and Best Management Practices (BMPs) which the agency has selected as the means to control nonpoint source pollution where

necessary to protect or achieve approved water uses. Economic, institutional, and technical factors shall be considered in a continuing process of identifying control needs and evaluating and modifying the BMPs as necessary to achieve water quality goals. Regulatory programs shall be identified where they are determined to be necessary by the State to attain or maintain an approved water use or where non-regulatory approaches are inappropriate in accomplishing that objective. *The state has an approved Nonpoint Source Management Plan and program which outlines the state's approach to controlling nonpoint source pollution and addresses this element fully. The plan is currently in the process of an update.*

BMPs shall be identified for the nonpoint sources identified in section 208(b)(2)(F)–(K) of the Act and other nonpoint sources as follows:

(A) Residual waste. Identification of a process to control the disposition of all residual waste in the area which could affect water quality in accordance with section 208(b)(2)(J) of the Act. *Residual waste is the solid material, or sludge, remaining after wastewater sewage treatment. Disposal of residual waste is addressed through a permitting process under the state UPDES Biosolids program and the Groundwater Protection Program. Utah's regulatory approach fully addresses the requirements of this element.*

(B) Land disposal. Identification of a process to control the disposal of pollutants on land or in subsurface excavations to protect ground and surface water quality in accordance with section 208(b)(2)(K) of the Act. *Utah's Groundwater Protection Program specifically addresses permitting requirements for land disposal. Additional technical requirements are listed at R317-3 for reuse of wastewater. The Division's Operating Permit Program addresses land application of wastewater.*

(C) Agricultural and silvicultural. Identification of procedures to control agricultural and silvicultural sources of pollution in accordance with section 208(b)(2)(F) of the Act. *Utah has an approved Nonpoint Source Plan for Agriculture and Silviculture incorporated into the statewide Nonpoint Source Management Plan that addresses these procedures fully.*

(D) Mines. Identification of procedures to control mine-related sources of pollution in accordance with section 208(b)(2)(G) of the Act. *Utah has an draft Nonpoint Source Plan for Mining that is currently in the approval process for inclusion into the statewide Nonpoint Source Management Plan that addresses these procedures fully.*

(E) Construction. Identification of procedures to control construction related sources of pollution in accordance with section 208(b)(2)(H) of the Act. *Pollution from construction is regulated through the Division of Water Quality's stormwater program within the UPDES permitting program. Control of pollution from stormwater is also addressed in the state NPS Management Plan and Program.*

(F) Saltwater intrusion. Identification of procedures to control saltwater intrusion in accordance with section 208(b)(2)(I) of the Act. *Not Applicable*

(G) Urban stormwater. Identification of BMPs for urban stormwater control to achieve water quality goals and fiscal analysis of the necessary capital and operations and maintenance expenditures in accordance with section 208(b)(2)(A) of the Act. *Urban stormwater is regulated through the Division of Water Quality's stormwater program within the UPDES permitting program. Stormwater permitting requires submittal of plans from municipalities which identify the necessary components of this element. Control of pollution from stormwater is also addressed in the state NPS Management Plan and Program.*

(5) Management agencies. Identification of agencies necessary to carry out the plan and provision for adequate authority for intergovernmental cooperation in accordance with sections 208(b)(2)(D) and 303(e)(3)(E) of the Act. Management agencies must demonstrate the legal, institutional, managerial and financial capability and specific activities necessary to carry out their responsibilities in accordance with section 208(c)(2)(A) through (I) of the Act. *As indicated previously, Utah formally designated water quality management agencies in the late 1970's. Since that time there has been no finding or demonstration of legal, institutional, managerial and financial capability. The current level of water quality planning engagement and capability for each of the designated 208 agencies varies considerably.*

(6) Implementation measures. Identification of implementation measures necessary to carry out the plan, including financing, the time needed to carry out the plan, and the economic, social and environmental impact of carrying out the plan in accordance with section 208(b)(2)(E). *This element is conducted for state-funded wastewater projects on a project-by-project basis by the Division's Construction Assistance Program. Non state-funded projects are not currently required to address this element. Watershed plans and TMDLs identify implementation measures, costs and timelines but do not typically identify financing or social and or environmental impacts of carrying out the plan.*

(7) Dredge or fill program. Identification and development of programs for the control of dredge or fill material in accordance with section 208(b)(4)(B) of the Act. *Dredging and discharging dredged materials are federally regulated activities. Section 401 of the CWA requires states to certify any federally permitted operations that have the potential to have an adverse effect on water quality. The certification process allows the state to assure that the project adheres to applicable effluent limits and water quality standards.*

(8) Basin plans. Identification of any relationship to applicable basin plans developed under section 209 of the Act. *The 209 Basin plans were a more general precursor to the areawide 208 plans. They gave a more general description of the watershed area and focused primarily on point sources. In the Mountainland AOG area two such basin plans were developed, the Jordan River basin and Weber River Basin. They were complete prior to the 208 water quality management plans and were referenced in those documents. The 209 basin plans have not been done since so this requirement is no longer applicable.*

(9) Ground water. Identification and development of programs for control of ground-water pollution including the provisions of section 208(b)(2)(K) of the Act. States are not required to develop ground-water WQM plan elements beyond the requirements of section 208(b)(2)(K) of the Act, but may develop a ground-water plan element if they determine it is necessary to address a ground-water quality problem. If a State chooses to develop a ground-water plan element, it should describe the essentials of a State program and should include, but is not limited to:

- (i) Overall goals, policies and legislative authorities for protection of ground-water.
- (ii) Monitoring and resource assessment programs in accordance with section 106(e)(1) of the Act.
- (iii) Programs to control sources of contamination of ground-water including Federal programs delegated to the State and additional programs authorized in State statutes.
- (iv) Procedures for coordination of ground-water protection programs among State agencies and with local and Federal agencies.
- (v) Procedures for program management and administration including provision of program financing, training and technical assistance, public participation, and emergency management.

Utah has a comprehensive, state-based groundwater protection program and permitting process developed to address the potential introduction of pollutants into the groundwater of the state. Part of this program includes the federally-based Underground Injection Control Program. Utah's Groundwater Protection Program goes well beyond the minimum element requirements of section 208(b)(2)(K) of the CWA.

Additional 208 Regulatory Requirements

Update and certification

CWA Section 208(b)(3) Areawide waste treatment management plans shall be certified annually by the Governor or his designee (or Governors or their designees, where more than one State is involved) as being consistent with applicable basin plans and such areawide waste treatment management plans shall be submitted to the Administrator for his approval.

40 CFR 130.6(e) Update and certification. State and/or areawide agency WQM plans shall be updated as needed to reflect changing water quality conditions, results of implementation actions, new requirements or to remove conditions in prior conditional or partial plan approvals. Regional Administrators may require that State WQM plans be updated as needed. State Continuing Planning Processes (CPPs) shall specify the process and schedule used to revise WQM plans. The State shall ensure that State and areawide WQM plans together include all necessary plan elements and that such plans are consistent with one another. The Governor or the Governor's designee shall certify by letter to the Regional Administrator for EPA approval that WQM plan updates are consistent with all other parts of the plan. The certification may be contained in the annual State work program.

SRF projects and UPDES permits must be consistent with 208 plans

CWA Section SEC. 603(f). Consistency with Planning Requirements - A State may provide financial assistance from its water pollution control revolving fund only with respect to a project which is consistent with plans, if any, developed under sections 205(j), 208, 303(e), 319, and 320 of this Act.

40 CFR 130.6(f) Consistency. Construction grant and permit decisions must be made in accordance with certified and approved WQM plans as described in §§130.12(a) and 130.12(b).

R317-8-2.2(6) Prohibitions. No permit may be issued by the Executive Secretary:
... (6) For any discharge inconsistent with a plan or plan amendment approved under Section 208(b) of CWA.

Buzzards Bay Lawsuit

In September 2011 the Conservation Law Foundation and Buzzards Bay Coalition filed a federal Clean Water Act lawsuit holding the EPA failed to fulfill its obligation to oversee a 208 Areawide Water Quality Management Plan for Cape Cod. The lawsuit states that EPA's failure to annually approve and require needed updates to the plan allowed nitrogen pollution to continue unabated, resulting in the serious degradation of water quality on Cape Cod. The Areawide Plan for Cape Cod was developed in 1978 and has not been updated since. In a separate suit, the same two groups challenged 13 separate EPA approved TMDLs in the Buzzards Bay area, charging they are inadequately protective because they failed to protect Cape Cod's groundwater from nitrogen and phosphorus pollution originating from septic systems, stormwater systems and wastewater treatment systems that were exempted from permitting limits.

In a December 6, 2011 joint motion before the U.S. District Court for the District of Massachusetts, the Conservation Law Foundation and EPA asked the court to hold both cases in abeyance for an additional 40 days, until January 20, 2012 pending continuing settlement negotiations. The court has set a suit mediation deadline. If no agreement is reached, the EPA must then file answers to the plaintiffs' complaints by February 21st.

Questions

What would happen if updated 208 planning is not done? This is essentially the status quo. Districts and towns plan and react to growth pressures in the community by expanding infrastructure to meet those needs. Most districts, and certainly the large metropolitan districts, have an active planning process geared at meeting future wastewater needs in their areas. However, in some areas high growth areas, we may miss an opportunity to conduct proactive water quality planning. The potential exists for delay in some future projects not in conformance with the approved 208 water quality management plan.

Do 208 management plan updates need to occur across the entire state or can they be targeted to area of demonstrated need? The opportunity exists to do targeted updates similar to what has been done in the past. This option is subject to some of the same issues identified in the above question.

How did the past 208 plan do in predicting future needs? Many of the rural areas of the state did not have significant point sources that required significant planning. Most of the reports centered on non point source control that was more generic. Population centers may currently have a slightly different treatment process or capacity than that indicated in the 208 plan, but are generally consistent.

In reviewing the current status against the original MAG plan, we found that the plan generally did a good job in addressing future needs. The planning horizon of the study went to 1995. The plan outlined the large regional facilities such as Snyderville Basin plants, the Timpanogos Regional Plant in northern Utah County, and the regionalization of the Orem and Provo plants. The construction of the planned regional plant in south Utah County (South Utah Valley Municipal Water Association) was not envisioned, but that was outside the planning horizon. The same is true for Jordanelle Special Service District's new membrane plant in Heber Valley. The plan envisioned a regional total containment lagoon for Kamas, Oakley and Francis. Francis remains un-sewered, Oakley has a membrane plant and Kamas is operating discharging lagoons. Eagle Mountain's Wastewater plant in west Utah County was not included.

What is the cost of updating the 208 plans across the entire state? The Salt Lake County plan cost close to \$1 million dollars in contract costs, plus significant resources from county staff. The current MAG request for an update in two of their three counties of their area is \$840,000 in contract and administrative costs. A rough estimate of statewide costs (excluding Salt Lake County) would be in the range of \$8-12 million. Additional costs would likely be needed to staff and implement the plans at the designated water quality management agencies.

Can 208 plans be amended rather than completely redone? Yes. Partial amendments can and have been in the past. It becomes more a matter at what point the information in the original plans becomes less and less relevant. Planning in the area of wastewater treatment infrastructure appears to be an area that is amenable to partial updates.

What is appropriate cost share? Significant local buy-in should be required. Staff is recommending a cash match in the range of 25-50%.

What was the cost of the Salt Lake County Update? The Salt Lake County plan cost close to \$1 million dollars in contract costs, plus significant resources from county staff.

Does the 208 planning process address nonpoint sources? As identified in a previous section, in addition to controlling pollution from municipal wastewater treatment facilities and industrial sources, section 208 also authorizes the plans to "identify, if appropriate, agriculturally and silviculturally related nonpoint sources of pollution," including "return flows from irrigated agriculture, and their cumulative effects, runoff from manure disposal areas, and from land used for livestock and crop production," "construction" and control those sources of pollution "to the extent feasible." Section 208 is one of the few provisions in the CWA that give EPA authority, albeit qualified, to directly manage pollution from nonpoint sources.



Mountainland

ASSOCIATION OF GOVERNMENTS



AREAWIDE WATER QUALITY MANAGEMENT PLAN FOR SUMMIT, UTAH AND WASATCH COUNTIES

JUNE 1977



AREAWIDE WATER QUALITY
MANAGEMENT PLAN

for

SUMMIT, UTAH, AND WASATCH
COUNTIES



"FINAL"

Prepared By

HORROCKS AND CAROLLO ENGINEERS,
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for

MOUNTAINLAND ASSOCIATION OF GOVERNMENTS

August 1977

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July 28, 1977

Honorable Scott M. Matheson
Governor, State of Utah
State Capitol Building
Salt Lake City, Utah 84114

Dear Governor Matheson:

The Executive Committee of the Mountainland Association of Governments would like to take this opportunity to submit to your office for certification the final plan of the Mountainland Association of Governments 208 Water Quality Management Study. This plan has also been reviewed by officials in the Utah State Division of Health, the Environmental Protection Agency, and other State and local agencies. Comments and suggested revisions have been incorporated in the final plan.

This program which has been under study for the past two years is the product of a dedicated group of staff, consultants, elected officials and numerous citizens and citizen groups throughout the Mountainland area.

Public hearings were held earlier this month in Utah, Wasatch and Summit counties for the final plan draft. Two additional public hearings are tentatively scheduled for the revised final plan on August 17th and 18th in Provo and Heber City respectively. The final plan will then be presented to the Mountainland Executive Committee at their meeting on August 24, 1977, for final adoption.

Our 208 staff is available to participate at any time with state officials in working out the details of the state certification process.

Sincerely,

A handwritten signature in dark ink, appearing to read "Homer C. Chandler". The signature is fluid and cursive, with a long horizontal stroke at the end.

Homer C. Chandler
Executive Director

cb
Encs.

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